



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2015/2016 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST SEMESTER EXAMINATION FOR DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY.

INTRODUCTION TO INFORMATION COMMUNICATION TECHNOLOGY

DATE: 1/8/2016

TIME: 8:30 – 10:30 AM

INSTRUCTIONS

Answer Question ONE and Any Other Two Questions

QUESTION ONE (COMPULSORY)

- a) Define the following terms in respect to ICT (5 marks)
 - i) Hardware
 - ii) Software
 - iii) Peripherals
 - iv) WIMP
 - v) GIGO
- b) List and describe any five utilities. (5 marks)
- c) Outline two limitations of sound output. (2 marks)
- d) Analyse three functions of an operating system. (6 marks)
- e) Indicate two application areas of the following software. (4 marks)
 - i) Word Processors
 - ii) Graphics packages
- f) Leo intends to upgrade his computer. List two examples of such upgrades. (2 marks)
- g) Describe the following computer crimes. (6 marks)
 - i) Sabotage
 - ii) Cracking
 - iii) Tapping

QUESTION TWO

- a) The hard disk is the most popular backup device. Analyse three reasons why this is so. (6 marks)
- b) Explain **four** reasons why a computer is considered as a powerful tool. (4 marks)
- c) Other than cost, outline three considerations when choosing a backup. (3 marks)
- d) Outline two strengths and two limitations of magnetic tapes as storage devices. (5 marks)
- e) List two control measures against hard disk crush. (2 marks)

QUESTION THREE

- a) Classify the following devices as either input or output
Plotter, Scanner, Digital camera, Barcode reader, Monitor, Speaker, Microphone, Keyboard, Printer, Joystick (5 marks)
- b) Machakos University College has automated most of its operations. Describe three areas where this has happened and clearly indicate the benefits derived from this move. (6 marks)
- c) Most libraries still use COM.
 - i. Differentiate between the two types of COM. (2 marks)
 - ii. Indicate two merits and two demerits of this mode of output. (4 marks)
- d) Name the three major components of the CPU. (3 marks)

QUESTION FOUR

- a) Name the technology used in the first, second and third generation computers. (3 marks)
- b) Using **two** examples in each case, describe **two** ways of classifying computers. (6 marks)
- c) List **three** types of softcopy output devices. (3 marks)
- d) Use a diagram to illustrate the difference between bus, star and ring topologies (6 marks)
- e) Indicate two strengths of the fiber optics as communication medium. (2 marks)

QUESTION FIVE

- a) Juma who is a student in MUC intends to buy a laptop and has approached you for advice. Explain to him **two** factors that will determine the cost of the laptop. (2 marks)
- b) Describe **three** variations of compact disks. (6 marks)

- c) Differentiate between RISC and CISC Process. (4 marks)
- d) Lynn has engaged the services of a software house to develop software that will to manage her tourism business. Explain two benefits that she will derive from this move. (2 marks)
- e) Describe any two types of operating systems. (2 marks)
- f) Using an example in each cases differentiate between half duplex and full duplex transmission. (4 marks)